CLAIMS

WHAT IS CLAIMED IS:

1. An exteriorly positionable anatomical brace for stabilizing a uniting pivoting joint disposed between a first limb structure and a second limb structure of a living being, the brace comprising:

a) an upper frame member and a lower frame member;

b) an upper cuff for encompassing a portion of the first limb structure and secured to the upper frame member, and a lower cuff for encompassing a portion of the second limb structure and secured to the lower frame member;

c) an upper securement member for securing the upper cuff to the first limb structure, and a lower securement member for securing the lower cuff to the second limb structure; and

d) a pivoting joint member connecting the upper and lower frame members, said joint member comprising two opposing pivoting assemblies each respectively positionable on one side of the uniting pivoting joint, wherein each said pivoting assembly comprises:

i) a forward arm member and a rearward arm member each having an upper end and a lower end; and

ii) two upper spherically-pivotal socket mounts disposed in the upper frame member, and two lower spherically-pivotal socket mounts disposed in the lower frame member, whereby each upper end of each arm member is pivotally retained in a respective upper socket mount and each lower end of each arm member is pivotally retained in a respective lower socket mount.

2. An exteriorly positionable anatomical brace as claimed in Claim 1 wherein the two upper

spherically-pivotal socket mounts have pivot ratios differing from each other.

3. An exteriorly positionable anatomical brace as claimed in Claim 1 wherein the two lower spherically-pivotal socket mounts have pivot ratios differing from each other.

4. An exteriorly positionable anatomical brace as claimed in Claim 1 wherein each of the spherically-pivotal socket mounts has a pivot ratio different from all other socket mounts.

5. An exteriorly positionable anatomical brace for stabilizing a uniting pivoting joint disposed between a first limb structure and a second limb structure of a living being, the brace comprising:

a) an upper frame member and a lower frame member;

b) an upper cuff for encompassing a portion of the first limb structure and secured to the upper frame member, and a lower cuff for encompassing a portion of the second limb structure and secured to the lower frame member;

c) an upper securement member for securing the upper cuff to the first limb structure, and a lower securement member for securing the lower cuff to the second limb structure; and

d) a pivoting joint member connecting the upper and lower frame members, said joint member comprising two opposing pivoting assemblies each respectively positionable on one side of the uniting pivoting joint, wherein each said pivoting assembly comprises:

i) a forward arm member and a rearward arm member each having an upper end and a lower end;

ii) two upper spherically-pivotal socket mounts disposed in the upper frame member, and two lower spherically-pivotal socket mounts disposed in the lower frame member, whereby each upper end of each arm member is pivotally retained in a respective upper

socket mount and each lower end of each arm member is pivotally retained in a respective lower socket mount; and

iii) a substantially infinitely adjustable limb extension regulator for demarcating limb extension range.

6. An exteriorly positionable anatomical brace as claimed in Claim 5 wherein the two upper spherically-pivotal socket mounts have pivot ratios differing from each other.

7. An exteriorly positionable anatomical brace as claimed in Claim 5 wherein the two lower spherically-pivotal socket mounts have pivot ratios differing from each other.

8. An exteriorly positionable anatomical brace as claimed in Claim 5 wherein each of the spherically-pivotal socket mounts has a pivot ratio different from all other socket mounts.

9. An exteriorly positionable anatomical brace as claimed in Claim 5 wherein the limb extension regulator is an expanse of a length of cable extending between the rearward arm member and the upper frame member.

10. An exteriorly positionable anatomical brace as claimed in Claim 9 wherein the length of cable is fabricated of braided metal strands.

11. An exteriorly positionable anatomical brace as claimed in Claim 9 additionally comprising an exteriorly accessible controller for lengthening or shortening the length of cable extending between the rearward arm member and the upper frame member, thereby regulating limb extension distance.

12. An exteriorly positionable anatomical brace as claimed in Claim 11 wherein the exteriorly accessible controller is a threadably-engaged screw shaft distally attached to the length of cable, said shaft being tool-accessible for rotation and resulting lengthening or shortening of the

length of cable.

13. An exteriorly positionable anatomical brace as claimed in Claim 11 additionally comprising an externally visible measurement scale for the length of cable such that respective lengths of cable extending between the rearward arm member and the upper frame member of each opposing pivoting assembly of the pivoting joint member can be made equal.